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"Economy is a distributive virtue, and consists not in saving but in selection. Parsimony requires no providence, no sagacity, no powers of combination, no comparison, no judgment."

—Edmund Burke, *Letter to a Noble Lord* (1796)

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THE MYTH OF OVERKILL

A Critique of "A Strategy for American Security"

By Amrom H. Katz

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This magazine rarely devotes its limited space to detailed refutation of theories and proposals of a single individual. In the case of Prof. Seymour Melman, of Columbia University, we are making an exception. This is not solely because we believe his theories to be specious, but because we believe them to be dangerously so in that they are capturing the fancy of certain members of Congress and also that of other policy-makers and -molders.

The author of the following study possesses unimpeachable credentials. Mr. Katz is a physicist and an outstanding expert on aerial and space reconnaissance, first with the Air Force and now with the RAND Corporation.

More importantly, he has a long record of activity and interest in the problems of peace as well as war. He is a long-time member of United World Federalists and has served on its National Executive Council. He was an original member of the Committee on Security Through Arms Control of the National Planning Association. He is on the Board of Sponsors of the magazine *War/Peace Report*, the Board of the magazine *Disarmament and Arms Control*, and the Advisory Board of the *Journal of Arms Control*. He has actively participated in most of the major arms-control and disarmament conferences in this country and abroad, including the Pugwash Conferences in Moscow and London, the Arden House Strategy for Peace Conferences, several meetings of the American Assembly, the Stowe (Vt.) Conference of Scientists on World Affairs, and the Accra Assembly in Ghana. He was a Professor in Residence of Political Science and Senior Fellow in the National Security Studies Program at UCLA in 1963 and is a consultant to the US Arms Control and Disarmament Agency. We are proud to count him among our authors.—THE EDITORS

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I. THE ROAD TO MELTOWN—WHAT DOES MELMAN SAY?

THE prophet of overkill has risen in the East, and his preaching is sweet to the ears: "We [the US] have stockpiled bombs enough to kill the Soviets hundreds of times over; but killing them more than once is costly, stupid, and wasteful; we can kill them only once, so we should stop wasting money. We should cut the defense budget by at least \$22 billion. Here is a list of the things to do with the \$22 billion you save."

And who wouldn't like such news? Especially when delivered with conviction and without equivocation by the leader of a group of professors. When large sums are spent there is often a strong suspicion that much is wasted. And when complex problems of strategy, politics, and procurement swirl around our heads like nebulae—who would not like to have all this reduced to plain talk and simple arithmetic?

Answers are what we want—the simpler and neater the better. That's what Seymour Melman gives us.

Professor Melman and six associates have prepared

a booklet entitled "A Strategy for American Security." The following quotation from the *Wall Street Journal*, January 24, 1963, appears on the inside cover of the booklet:

It's impossible to buy a perfect defense; nothing can always deter somebody else's irrational act, nor is there any technical formula guaranteed to tell how much should be spent, or for what, to assure the best of always imperfect protection. But many people here think the whole process could be improved by more informed consideration of the strategies, instead of just the hardware, that dictate all the spending.

It would seem that we're off to a fast start. An informed discussion of strategies is always in order. But this premise is supported only by the title of the booklet; one vainly turns the pages looking for any further discussion of strategy. There is none.

Let us then briefly examine Melman's statements
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and proposals. The booklet consists of eleven chapters. Chapter I: "How Much Military Power Is Enough?" and Chapter II: "The Military Budget, Is There a Choice?" are by Melman. The rest of the booklet contains chapters by Melman and his colleagues which deal largely with how defense money could be better spent.

This paper will concern itself primarily with the first two chapters, which are the heart of the booklet. They have attracted considerable attention by their statement of Melman's thesis. Let's see if we can discover what the thesis is. Melman quotes Secretary McNamara's judgment that "we calculate that our forces today could still destroy the Soviet Union without any help from the deployed, tactical air units, or carrier task forces or Thor or Jupiter intermediate-range ballistic missiles." Melman then asserts: "Never before could one think of military power sufficient to kill a population more than once," and describes how the assumed American and Soviet available megatonnage could be used against cities of more than 100,000 population.

Back to the meager details of his analysis shortly. But first, his conclusion. On what he labels a "conservative" assumption, in which he allowed a fifty percent attrition of carriers, he asserts that for the 140 major cities of the Soviet Union the US "overkill capacity" is seventy-eight times. In his terms this means that we have seventy-eight times as much as is necessary to kill the 140 largest cities in the Soviet Union. Melman also "calculates" that for the 370 major cities of the Sino-Soviet bloc, the US has an "overkill capacity" of forty-one times, allowing for thirty percent attrition of delivery systems.

Although strategic considerations are desperately needed here, they are completely missing. What are his attrition assumptions based upon? Who attacks first? The United States? The Soviet Union? Does he assume the US is starting a preventive war or a pre-emptive war, or does he assume that the Soviet Union has struck the US first, and that we are responding with an all-out counter-city campaign? Is there any mention of alternative target systems—of a partial response? Any thought of damping out a war? Nary a word! *We have no campaign analysis at hand—only conclusions.*

But let's see what happens to his figures if we change certain of Melman's "conservative" assumptions. Suppose the United States suffered a surprise attack. It is improbable that the Soviets would attack our cities first, leaving alone our bombers and our missiles. The cities aren't going anywhere; they would be available for later attack, for use as hostages, for threat and bargaining purposes. Suppose ninety percent of our military forces were struck, and that the reliability of the remainder is thirty percent, and of that thirty percent, local defenses in the Soviet Union can knock down seventy percent—we are now down to a force over the Soviet Union of but one percent of everything we had. In terms of our Melman unit (the "overkill" statistic) we are down to but two times and, if the entire Sino-Soviet bloc is considered,

by Melman's own statistics, we have no overkill at all! And even this result assumes adequate retargeting, good communications, reallocation of weapons, etc.

What's wrong then? He assumes that deterrence has failed. He then assumes a counter-city target system, and he arbitrarily assumes very low attrition figures (that is, he assumes that a high percentage of the weapon carriers we start with will survive, prove reliable, and get to their targets). However, the purposes of our forces are to *deter*, not to *tempt*, and, if war comes, to terminate it quickly with minimum loss of life. Melman apparently assumes that even if the Soviets strike first, this first strike is instantaneous, and would use the entire Soviet capability. He also assumes that *all* of the United States's response must come later in time than *all* of the Soviet's first move. Melman needs this assumption, for otherwise counterforce operations (that is, the US forces responding with an attack on as yet unused Soviet forces) make sense. It is Melman's clear purpose to have this concept make no sense, and to make our present posture appear exclusively dependent on this concept.

Melman asserts: "Until recently the 'counterforce' concept of national security has appeared to have the full endorsement of the Secretary of Defense." He says: "The counterforce perspective has been rendered implausible by the development on the Soviet side of the same sort of hard missile locations and submarine carriers for missile launching as developed by the United States. Under these circumstances, the counterforce perspective reflected in the administrative budget has no military reality"

He seems to believe that a hard missile site is *absolutely* invulnerable. But in truth, "hardness" certainly does not confer or connote absolute invulnerability. A "hard" missile site is simply more difficult to attack than if it were "soft." This problem is part of the reason for the "extra" forces that Melman talks about. But the main needs for what Melman calls "extra" forces stem from uncertainty and the need for insurance. *We want to be far away from that threshold which might tempt the Soviets. And this has little to do with a counterforce strategy.*

It is truly amazing that certainty comes easily, if without grace, to those most removed from the realities and complexities of military hardware and responsibilities. It would be difficult to explain to the American public that our only position in the event of war is to murder the Soviet population, smash their cities, and not even attempt to touch those forces which if left alone would succeed in killing Americans. *Strangely enough, it is the military and "hard-headed" civilian analysts who are against a strategy whose sole content is mutual and complete annihilation of cities. It is Melman's so-called strategy that can be properly termed senseless, inhumane, and mechanical.*

It is infinitely better not to have nuclear war, and it is the fundamental purpose of our forces to discourage any opponent from adventurism and from miscalculation of the kind Melman makes. We hope that we have deterred and will continue to deter the Soviets from deliberately planning a surprise attack

on the United States. Are we wasting money if we achieve this?

Melman's answer is that we have the wrong strategy, and we can do it cheaper. But can we? The only strategy he considers is the counter-city strategy, and this, he asserts, we can do cheaper. But as noted above, this assumption depends upon some nonexplicit assumptions about who starts the war, about the potential damage that can be dealt our forces in the event of war, about the reliability of the remaining forces, about the attrition on the way to and in the target area. His calculations are extraordinarily sensitive to these assumptions, but neither the fact of the sensitivity nor any of the assumptions are mentioned.

Let us look at an excerpt from Melman's Chapter I, which illustrates the problem of sensitivity to assumptions. On page two of his booklet he calculates:

The destructive capability of Soviet forces is estimated by the same reasoning applied to US forces with some modifications. . . . On the same basis of our first set of calculations, the Soviet Union has the following capabilities:

For the 2,000 cities in the world of 100,000 or more population no "overkill capacity" if a thirty percent attrition is applied to delivery systems. This is so because of about 2,500 delivery vehicles, thirty percent losses would leave less than one vehicle per target. However, if one figures, arbitrarily, an attrition rate of twenty percent, then USSR delivery would be 3.2 megatons per 100,000 persons in major cities or an overkill of 160 times.

This is remarkable: By changing his assumption from thirty percent to twenty percent attrition, Melman goes from a no-overkill capacity to an "overkill" of 160 times! And he demonstrates no preference for either assumption, nor a basis for his assumptions, calling them arbitrary! This arithmetical flimflam doesn't even catch Melman's eye. We saw earlier how, by introducing other assumptions on attrition (perhaps not as arbitrary as Melman's) the US force can be reduced to less than one percent of our total force! Even these calculations illustrate the sensitivity of the analysis to preliminary assumptions.

From these examples, and from further perusal of the booklet, one can understand how frustrating it is for military and civilian analysts to "answer" Melman's formulation. *It is frustrating for these simple reasons:*

- *There is no analysis.*
- *The presentation is not of a "strategy" but of a reaction to some unstated level of Soviet attack. (On whom? The US? NATO?)*
- *This assumed "strategy" is not compared with any other strategy.*
- *The particular single-response strategy (assumed by Melman) is not US strategy as described by military or civilian officials.*

Figures on military force levels and deployments are not handed down from Mt. Sinai. They are arrived at by answering the threat and considering what the other fellow is doing, and by allocating forces and funds among several missions: conventional war (non-nuclear), nuclear war, counterinsurgency, military aid, etc. No, the defense budget is not sacrosanct. Of course it can be modified, and I am not arguing against

any form of military cuts. This huge budget and its allocations are subject to continuous reexamination. But we are certainly not going to base force reduction or major budget changes on the kind of arithmetic and argument in Melman's booklet.

Suppose we were to accept Melman's strategy, described in Chapter II of his booklet. He does not and cannot describe which forces he is cutting, because the elements of his budget are R&D, operation and maintenance, military personnel, etc., instead of being expressed in terms of forces, aircraft, missiles, conventional forces, and armament or the like. It would have been interesting to see which forces are cut and how much.

What does he say about conventional forces? And of the requirement of responding when we have to, at some level short of an all-out automatic commitment to destroy all the major cities of the Soviet Union? There is not one solitary word on any of these questions. What does he say about the cost of controlling our forces—of protecting them so they do not have to respond in a hurry, so they can, in fact, survive and pause while an attack—or an accident—is being evaluated? There is nothing on this either.

Melman does sweeten the pie. He presents an administration defense budget of \$56 billion. In his first approximation to cutting this budget, he cuts out \$22 billion, calling what is left a "maintenance of present forces" budget. This \$22 billion is taken from procurement, from research and development, from military construction, from military assistance, and from the atomic-energy program. What, then, replaces the B-47s which are phasing out—the B-52s which are aging? Where then do we get the forces with which to fight counterinsurgency or conventional warfare when needed? Not a word about these things.

Nevertheless, Melman's proposed slash of \$22 billion looks minor indeed compared to an alternative he calls the "Finite Deterrent" Budget. This budget weighs in at \$9 billion—a slash of \$47 billion. Using a subtle form of budget by association Melman bases his \$9 billion budget on conclusions drawn from some remarks made by Dr. Jerome Wiesner in 1960. Quoting from the Wiesner paper, Melman says: "Studies made independently by the US Army and Navy have indicated that even in the absence of agreements limiting force size and permitting inspection, 200 relatively secure missiles would provide an adequate deterrent."

Oh, to have been President! And to be confronted by Cuba or Berlin with only this particular hand showing! What range of responses, what options, what choices does Melman leave us? He offers no response, no option short of the destruction of 140 Soviet cities. There is, of course, considerable doubt that Melman is in favor of such a murderous option, and there is some doubt that the US could or would carry out this idea. It is doubtful that this solitary threat—the US massive response—could be called out for any Soviet provocation or military action short of large-scale attack on the United States. And the Soviets may suspect this, as well.

There is no objection to an inexpensive strategy; there is only one requirement which this strategy has
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failed to meet—that it be workable. *The problem the United States faces is not solely to save money; we should spend what we must, and do it sensibly.* We could save a lot of money by being isolationists, and we could cure the gold-flow problem at one and the same time. But this is not our main objective. We have assigned American isolationism to the history books.

Comparing the current Administration defense posture, attitudes, and strategy with Melman's, we might as well ask: Which strategy is more likely to get us into a war, and if a war were to start, which is guaranteed to kill more people? Lo and behold, it is Melman's!

II. GIRF— THE GUARANTEED INVULNERABLE RETAIATORY FORCE —WHO'S IN CHARGE?

WE LIVE in a world of uncertainty. Not at peace, we are not at war. Our principal military threat comes from the Soviet empire. The Soviet Union practices secrecy and maintains a closed society with great skill and determination. Thus we find, from time to time, that in building our defenses, we have had to pay heavy and excessive insurance premiums against evaluated risks, some of which may later turn out to be smaller than we thought or even imaginary. In doing this, we must bend all our efforts to protect ourselves against real risks and dangers. But the consequences of error are not symmetric: In the one case we may waste money; in the other we may spill large amounts of blood. We have more money than blood; the choice between errors is obvious.

What do we mean by security? I suggest that what we mean by security is freedom from both the fear and danger of violent war. These are quite different—the fear and the danger—and not at all redundant. We might well be confronted with the danger of violent war and for whatever reason—stupidity, blindness, bravado, or a large national dose of tranquilizers—we might have no fear. Similarly, we might have fear and not be in any real danger. And, of course, we might well have real fear in the presence of real danger.

Somehow we imply by security not only the absence of war, but the presence of some kind of freedom, and not only anarchic freedom but freedom and opportunity to pursue the peaceful activities of society.²

Part of our system of military deterrence against

central war is the *GIRF—the Guaranteed Invulnerable Retaliatory Force*. What is meant by this is simple in concept, although difficult and expensive to achieve and maintain.

To deter thermonuclear war we try to procure and arrange forces whose magnitude and disposition discourage a Soviet first strike. We hope that the Soviets will conclude that they are unable to destroy enough of this force on a first strike to prevent destruction of the Soviet Union by the remainder. Thus, making this calculation, the Soviet Union will presumably be deterred from launching an attack.

Let's look briefly at the words used in describing the GIRF. Clearly, the United States has much to do with buying and building and maintaining such a force. *But the Soviet Union has much to do with, and is in partial charge of at least two of these words: "guaranteed" and "invulnerable."* This is not always recognized by those who discuss these matters.

What we think is "invulnerable" may not be. "Invulnerability" depends not only on what we do, but on what the Soviet Union does. There is no absolute invulnerability. A "hardened" missile base may be so well protected that it would take several missiles to knock it out. Its alleged invulnerability may rest on this calculation and an assumption that this price is too high for an opponent to pay. But it may not be; it is a choice. The opponent may have a different way of calculating. Invulnerability is not an absolute, to be certified and forgotten. Our opponent may find a way to make cheaper warheads, or more of them—or, indeed, may package many warheads on one of his large missiles. Whether retaliation is guaranteed depends first on its passing the test of invulnerability. Assuming it passes that test, it then must be capable of getting through Soviet defenses. Remember that Melman's calculations include the B-47 force, now phasing out, and the B-52s whose life is probably limited to this decade. These systems, as well as a large number of ICBMs, are vulnerable, yet in Melman's tabulation, they are assigned, together with B-58s, Navy A-3Ds and A-4Ds—21,150 megatons out of a total of the 21,970 megatons Melman claims for our 1963 strategic forces! *Thus, Melman assigns the aircraft systems more than ninety-six percent of our strategic firepower, and he neglects vulnerability!*

In addition, these aircraft have to get through a Soviet defense system—a fact unmentioned by Melman, but one which has engaged both our planners and the Soviets as well. Clearly, the fundamental theorem of air defense—that the defense can exact a bigger price, in proportion, from small numbers of intruding aircraft than it can from larger numbers—though important, is too subtle to be reflected in Melman's static assertions.

We have customarily said, and believed, that the anti-ICBM problem is insoluble. The Soviets claim to have solved it. We can't assume that we have a guaranteed force without assuming that an effective anti-ICBM system is impossible.

Stability is not static, it is not automatic, it is not guaranteed, and, above all, it cannot be left untended.

III.

SAVING MONEY AND WHAT TO DO WITH IT

THE cornerstone of Melman's structure is the idea that he can slash our defense budget without decreasing our security.

Unfortunately for logic, clarity, and progress, many discussions of arms control and disarmament often get hung up on a discussion of conflicting goals—the saving of money and the enhancement of security.

Simultaneous achievement of these two goals would certainly be nice. But in the event that they conflict (and I suggest that they may)—there should be little question of priority.

Both Professor Melman and I attended the 1962 Accra ("World Without the Bomb") Assembly in Ghana. Most of the representatives at this conference were from the smaller states—the neutrals, the non-aligned, or the not-yet-fully aligned. Many of them seemed to have this attitude toward disarmament: "The United States is now spending about \$50 billion a year on arms. If we could achieve disarmament, there would be no need to spend this, and the United States could give it to us."

Admittedly, this is an oversimplification of the problem, but certainly not of the sentiments which yielded this expression. These same groups, by and large, trace all of the problems of the world back to the bomb. The answer to these two points was straightforward:

"The bomb appeared in the world in 1945, didn't it? Well, now let's see what's happened. Since 1945, about fifty new nations have been created; about a billion people have secured their freedom. Now, about a billion were already free, and about a billion people are in the Sino-Soviet bloc, and this adds up to the three billion people in the world. Further, more money has been spent on foreign aid by the United States since 1945 than in all human history by all the nations of the world up to that point. From the standpoint of the smaller groups represented here, how good could it possibly get?"

It is naïve to believe that, in the event of total disarmament, the \$50 billion per year now spent by the United States for defense would be given out in the form of foreign aid to underdeveloped countries, the

neutrals, and nonaligned states. Foreign aid is conducted to support our foreign policy, and is, in part, a response to competition, to threat, and to tension. This does not mean that were the Soviet Union to disappear, all foreign aid would cease. (It should be remembered that the Soviet Union and the other Communist bloc countries were invited to participate in the Marshall Plan.) But it is not *a priori* obvious that with such competition removed, foreign aid would necessarily go on as it has, nor is it likely that resources which the American taxpayer has been willing to pay for defense are resources which he would just as willingly supply in the form of greatly expanded foreign aid. The more sophisticated representatives at Accra knew this full well. It is questionable whether massive and sudden increases in foreign aid to underdeveloped areas can accomplish any good without the prerequisites of a middle class, of an educated population, and some industrialization.

Belief in the importance of adequate defense and military security measures does not conflict with simultaneous belief in a strengthened Peace Corps, in aid to education, in expanded medical services and research, in civil rights, in massive action on the unemployment problem, and on poverty, in foreign aid, and in related measures. *The goals of these latter activities and the programs are not competitive with defense, nor have they ever been*, despite the vigorous attempts of some groups to make us think so. This is especially true when there are unused and available resources in the US. Complementary, yes; competitive, no!

Ours is a big country, and we will continue to have the resources to do many things. If we have failed to support medical research adequately, to aid education, to work on many legitimate problems before Sputnik, failure to do so now, while regrettable, sad (and hopefully reversible), can hardly be charged to the size of either the space or the defense budget.

It was appropriate, not long ago, to suggest that we cannot take a defensive position and say what we want is everyone else to leave us alone. Nor are statements of national purpose much besides compass directions. We need purposeful thrust, equal in its domain to the thrust of our giant rockets, with consistent long-term national and international goals. It has been true for some time that "although waging war is deadly, it is intensely simple and direct, consisting principally of many people getting positive orders. Unfortunately, there isn't any corresponding set of positive orders, any prescription, that can be written for peace."

"We need some kind of gigantic moral equivalent of war, some activity on which we can focus and spend our energies and resources—the conquest of space, disease, hunger, the problem of world education, the development of resources, the problems of population. Clearly we don't have to invent problems."²

But we cannot embark in conscience on long-range projects whose success requires an environment of peace and security, without simultaneously working equally hard on maintaining security and attempting to secure peace.

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IV.

THE ECONOMIC ARGUMENT—

CAN WE SURVIVE A CUT IN DEFENSE SPENDING?

A COMMON argument encountered in discussions, debates, and literature on disarmament is that the opposition to disarmament in the United States is firmly based on the need for the arms industry as a central part of our economy. This argument is part of the working intellectual capital of that fairly large and extremely vocal group who, after either disregarding or denigrating almost everything President Eisenhower said in his first 7.99 years of office, have seized on and proclaimed as gospel Eisenhower's farewell remarks about the military-industrial complex.

Accompanying this argument is an implicit assumption that any disarmament process would be wholesale, swift, abrupt, and economically catastrophic. The fact is that in all the postwar years of negotiating on disarmament we have achieved only a partial test ban and a hot line agreement, neither of which directly affects either our budgets or those of the Soviet Union one iota. This sobering statistic should, but does not, impress those who see disarmament as imminent and opposition to it as based mainly on economic considerations. Such studies as have been performed^{3, 4} tend to show that adjustments can be made if planned for in plenty of time.

The Soviet Union, which used to argue that the United States needed heavy military expenditures to prevent economic collapse, reversed its position several years ago when it found that (1) this argument was not true, and (2) its advocacy, while the Soviets were simultaneously pressing for disarmament negotiations, made for obvious and embarrassing internal contradictions in policy.

What also seems to be forgotten in this worry about the economic problem is that we went through a much greater problem at the end of World War II, easily and successfully. In a speech sometime ago, Arthur Schlesinger, Jr., said:⁵

Let us first consider the economic arguments. From 1945 to 1946, the total government purchases of goods and services in the United States declined,

with the end of World War II, from \$82.9 billion to \$30.8 billion. This was a drop of over \$50 billion at a time when the total gross national product was only a little over \$200 billion. The decline in government spending then was, in short, about twenty-five percent of the gross national product—and our economy rose to take up the slack.

An equivalent decline today would be over \$130 billion—which is almost three times the size of our defense budget and half again as large as our total federal budget. The American economy would thus in no circumstances have to meet a decline in public spending comparable to that which it survived in 1945-46.

And if all present defense spending should cease tomorrow the American economy, which survived a decline in public spending amounting to one-quarter of the gross national product in 1946, could certainly survive a drop in public spending amounting to one-eleventh of our gross national product today. The argument that our economy requires the cold war is, in short, a phony.

The conditions following World War II were different from those which might follow some future significant amount of disarmament.⁶ But the statistics cited above bear pondering, and offer reassurance to those who fear economic effects of disarmament.*

It is, and has been, US policy to work for the establishment of some form of disarmament and arms control, and for relaxation of tensions. We ought to be able to use our economic strength to force the Soviet Union to be more serious about disarmament than they have been. Were we able to persuade them by demonstration that they cannot possibly win "the arms race" this might provide the incentive for more meaningful and productive negotiations than have taken place to date. As Schlesinger says in the same speech:⁵

The only lasting hope for a relaxation of tensions lies in the establishment of a system of general and complete disarmament. One great issue confronting us today is how we may best negotiate an effective disarmament agreement. Those who object to our defense budget evidently assume that, if we were to permit the Soviet Union to achieve a decisive margin of military advantage, the Soviet Union would reward us by suddenly accepting a program of effective world disarmament.

As a historian, I find it hard to understand how—in view of a sequence of international actions from the Stalin-Hitler pact of 1939 to the resumption of nuclear testing in 1961—anyone can suppose that the Soviet Union is animated by anything but an aggressive conception of its own interests. There is only one way in which we can persuade the Soviet Union that it must submit to a program of international arms inspection and control—that is by persuading the Soviet leaders that we can stay in the arms race as long as they can.

* These points are well recognized by Professor Vickrey, in his interesting contribution to the Melman pamphlet. But Vickrey's contribution seems almost independent of the other contributions.

V.

BEHIND MELMAN— A BASIS FOR HIS BELIEFS AND ACTIONS

MELMAN's booklet¹ is important and curious at the same time—important for its appeal, curious for its omissions. It is important because this oversimplified, erroneous, off-the-track collection of prescriptions and proscriptions seems to have appealed to some responsible, serious members of Congress, and to other concerned groups of citizens.

Certainly, the most important provocative statements in this booklet are in the sections written by Melman. Focusing on "overkill" and on our defense budget, they contain some reflections and assertions on our military posture, and presumably, our strategy. However, as noted earlier, there is nothing in these sections about the uses of military power, political objectives, the military threat from the Soviet Union, limited war, our alliances, or related topics. Were this not curious enough, I find nowhere in this booklet any discussion of disarmament or arms control. Neither word seems to appear even once.

The implicit assumption which seems to underlie Melman's thesis is that we have far too much military power (but he doesn't say for what). His only criterion for evaluating a force is that required to destroy the major Soviet cities and his only concern is with obtaining the cheapest countercity force.

The booklet is slim. Perhaps he should have enlarged it and included either references to or excerpts from his previous writings on disarmament and arms control. As one might suspect, his well-publicized views on these subjects are not independent of his conclusions on strategy. For that reason let us see what he has said about arms control.

Melman's views may be found in several places. His book, *The Peace Race*,² contains several chapters in Part 1: "Roads to Defeat," entitled "The Impotence of Military Power, Dangers of War from Failures of People and Machines, Can Military Deterrence Be Stabilized?" His introduction to *No Place to Hide*³ sets forth his views on deterrence and strategy in adequate detail. But perhaps the most succinct reference to what Melman thinks is in a short paper which appeared in *The Nation*.⁴

In that article Melman sees the emergence of the doctrine of arms control as a competitor to and a substitute for disarmament.

Melman stated that the "fathers of the idea of arms

control" constitute a diverse group of people who have adopted this notion for varying reasons. For some, he said, ". . . Arms control reflects the price of conscience." He saw another group: "A second trend favoring arms control can be recognized in certain military and political theorists together with munitions-makers who found in the doctrine a method for heading off the growing public pressures for disarmament. This group finds the dual appeal of arms control entrancing: It can be presented to the public as disarmament, yet in some views of arms control requirements it need not close down a single major military establishment or put any obstacle in the way of the Pentagon's war games and strategy planning."

The cold inference here—and it is hardly an inference—is that arms control is a Machiavellian conspiracy. In order to make the last quoted point of Melman's, one must feel that a subtle job of deception is being practised by arms controllers.

Another group of people who are in favor of arms control, Melman believed, is ". . . a group of men, many of them in government service, who tried repeatedly to implement disarmament measures and found themselves stymied by the opposition of the Pentagon and the AEC. . . . Wearily, this group has now decided it is futile to buck the military any longer and has turned to arms control." The last group whom he associated with the "fathers of the new doctrine" are ". . . those who fear disarmament because 'it would leave the United States naked.' . . . For these men, who have no explicit theory of society which they are prepared to match against Bolshevik doctrine, the sword is their only shield." I willingly leave amateur and mass psychoanalysis to Melman, without further comment.

Melman doubted that arms control can help to achieve military stability. He argued that in order to do so, "it is necessary to agree not only on the numbers of weapons in being but to freeze (a) the ability and (b) the will, to make new ones. The only way to freeze the ability to develop new weapons is to disband major research-and-development facilities and to put the personnel under appropriate inspection and control. No arms control scheme yet put forward contemplates any such step." [Emphasis added.]

But disbanding military research and development is precisely one of the steps which Melman urges in his currently proposed budget reductions! (See Ref. 1, pp. 3-4.) Thus the step Melman advocates is a unilateral step; it is not a negotiated, not an inspected, step. He would effectively discontinue all military research and development, and because this is a unilateral step it really accelerates instability.

He continues, ". . . The only way to freeze or to destroy the will to make new weapons is to achieve a relaxation of the present fear-ridden mentality engendered by distrust, which grips the world. This distrust, which is basically a political factor, will not be dispersed by agreements that are designed to regulate, but not to terminate, the arms race."

It is superfluous to point out what could be documented in detail: That the United States's proposals, debated at length, presented to the Eighteen Nation Disarmament Conference, discussed on many college

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campuses, at many meetings, do envision massive and wholesale reduction in arms, given proper conditions. These conditions have not been met, and likely will not be met by the Soviets, and the appearance of an environment of trust seems to be deferred.⁶

Melman asserts: "Arms control, therefore, will not achieve military stability. Military technologies will continue to be developed in the customary way with first one side and then the other seeming to have the advantage."

He questions that arms control will work, saying: "What exactly will arms control deter?" Presumably a major missile attack by one of the great powers upon the other, but equality in missiles, for example, i.e., arms control [this is his definition] will not necessarily deter a "first strike," if that promises advantage to one side or the other (assuming the will to strike is there). He continues: "Obviously, the more nearly equal the opposing forces are, the greater role surprise and evasive maneuvers can play in the outcome of the conflict. In this sense, arms control might well increase rather than decrease the danger of surprise attack." Now the question is, how does this statement jibe with his proposed plan which ignores the factors set forth above?

In fact, what is he selling? Setting these statements side by side with those in his booklet leaves one not only confused but also wondering.

Melman's 1961 article reflects considerable concern over the problem of accidents in the precipitation of catastrophe, and then, in a complete misunderstanding of the nature of arms control and the efforts being made (which were talked about well before the date of his article) to lessen such dangers, Melman asserts that arms control would not perceptibly lessen this danger.

* Melman's article in *The Nation* appeared early in 1961. Considering his later works, referenced in this paper, the views here quoted are fairly representative of his continuing viewpoints.

In discussing the spread of nuclear weapons—the N-country problem—Melman states a preference for and underscores the importance of a test-ban agreement which would limit the number of nuclear powers, and again, in an egregious misunderstanding and misstatement of what arms controllers are and have been for, states that "this inference is not generally made by supporters of the arms control doctrine." This is nonsense.

What is he for? He states a preference for "inspected disarmament." But this has been our policy for many years! The reasons that we have no inspected disarmament remain clear.

Melman concluded this article by crystallizing the distinctions (as he saw them) between those in favor of disarmament versus those in favor of arms control. He said: "For each person in a free society, the choice of where to take one's chances is determined by one's values. If these values include a high regard for human life, a desire to develop man's potential for peaceful living, and the will to extend the boundaries of freedom, then the strategy of disarmament with its allied political and economic goals is the preferred course. But if one's values place human life at low worth and include a preference for man's destructive potential, and for authoritarian relations in political life, then some variant of conservative military theory, such as arms control, is preferable."

It is well to keep these comments in mind when reading Melman's proposals on allocation of the defense budget. One of the most revealing of Melman's statements is the last quoted, which attempts to preempt universally accepted values for the disarms, and while denying these "good" values to the "arms controllers," imputes to them lowly and despicable values.

As Melman says: "The pity is that so many of us make our choices without awareness of the ends, or values, that are being served." Well, here we can all certainly agree with Melman.

ANALYSIS of other's propositions is both necessary and important, but analysis alone is insufficient and dissatisfying. Melman's concept of what the United States is up to is in error. His proposed posture and structure of our military forces would increase instability, not stability. Were we to do what he suggests, the danger we may be in would increase, not decrease. Were we to do what he suggests, our chances for securing a meaningful disarmament agreement would be greatly reduced. But it is not enough to say that Melman is wrong. Analysis is necessary, but synthesis, and a positive program, must follow.

We are not necessarily doing all we can or should do, nor is everything we are doing perfectly right and sufficient. We must have a positive program at all times, and be working at it. Here are several elements of such a program:

1—MAKE THE WORLD SAFE FOR DISARMAMENT.

At the Accra Assembly in Ghana it was appropriate to suggest that:¹⁰

. . . the impasse is real. We found no room for compromise on fundamental issues; a useful analogy is to consider making a compromise when we come to a fork in the road. A compromise might well be to go between the two roads where there is no road at all.

It seems, therefore, incumbent upon all of us . . . to prepare, sadly but realistically, for a period of no meaningful disarmament—as the period since World War II has already been.

We must make and keep the world safe for disarmament.

As for the role of the nongiant powers—whether we call them small, neutral, nonaligned—or whatever word you prefer: Progress for these smaller powers depends above all upon stability in the world, meaning no war, no heightened tension. . . .

The neutrals, the small countries, as well as citizens of the larger powers, can make their voices effective, and they will be listened to, if, and only if: (1) They have a good understanding of the real problems between the big powers, so that these smaller countries do not go off on byways, up blind alleys, or on trivial projects. (2) Their role as intermediaries is an informed one, which embodies an appreciation of technical problems. Only upon such an appreciation can good questions be based; only thus can the discussion be objective, realistic, and elevated.

. . . The concern of the smaller countries will be respected, they will be listened to, and their role will be a historical, important, and useful one when they demonstrate: (a) responsibility, (b) accuracy, (c) understanding, and (d) responsiveness.

. . . Let us work for that stability which will permit a solution, if found, to be acceptable and accepted. I repeat: *We must make and keep the world safe for disarmament.*

We must accept the agonizing and all-too-likely protracted effort which will be required to reach agreement on disarmament, and on building such world institutions of law and justice as are necessary complements and components of a disarmed world.

These same requirements pertain to internal criticism in the United States: responsibility, accuracy, understanding, and responsiveness. Alas, too often, these characteristics are absent in domestic discussions. The reader may try these criteria on Melman's treatment of our problems.

2—FIGHT SECRECY.

Secrecy is the major obstacle standing in the road of progress toward disarmament.^{2, 11}

The partial test-ban treaty of 1963 has been widely hailed. What is being ignored and forgotten are the reasons that it is a *partial* test ban: Soviet obsession with secrecy and charges of espionage prevented the inclusion of underground tests in the treaty. Such tests would have required inspection on the territory of the Soviet Union. The inspection would have been strictly regulated; there would have been perhaps less than ten inspections per year, and the area would be strictly circumscribed. Still the Soviets objected to such inspection, and termed it "espionage." They still do.

This has been the thread that has run through all the disarmament discussions since World War II. Several years ago it appeared that:

As long as the Soviet Union stands firm on this rock of secrecy, we aren't going to have any disarmament. For if they insist on their form of secrecy, we aren't going to have inspection, we aren't going to have any arms control, and if we aren't going to have any arms control we never are going to have any disarmament—unless it's a nonpreferred variety, yielding not security, but insecurity.

The Russians are continually asking us to trust them. To me this situation is like having a neighbor in the community who decides to build not the standard six-foot fence, but a fence about 400 feet high. This should arouse some suspicion. And then when you hear odd noises going on behind this high fence and strange odors coming out and you see flashes of light and hear occasional loud arguments and curses, in which your name is featured, I'm not saying you have anything definite to go on, but you should get a clue that maybe something unpleasant and potentially dangerous is going on in there. Now, when you get curious and worried, and drill a small peephole in the fence, and he attempts to knock your head off for this, you are liable to treat his requests for trust with some suspicion. *The Soviet rock of secrecy must go. If this rock isn't removed, I submit that there will be no progress toward disarmament.*²

Unfortunately, the situation has changed not at all. The single, most succinct, informative, and official exchange on this problem of secrecy, and its implications for possible disarmament agreements, is the important, although almost universally ignored, exchange between John McCloy and Valerian Zorin on the American reservation to the joint statement of principles on disarmament.¹²

It is time, and in fact, long overdue, that we fully inform the American people of the significance of secrecy as practiced by the Soviet Union, and its implications for arms control and disarmament. Hopefully, we might educate some critics of American defense policy at the same time.

It is time we launch an unremitting campaign against secrecy. Not only does secrecy prevent disarmament, but it forces the arms race into higher and ever-increasing spirals. The United States budget which Melman is so critical of is, in part, a direct consequence of Soviet secrecy. Further, and much more important, secrecy is not as valuable to the Soviets as they think it is. Secrecy can evaporate without leaving a trace, and it is illusory to count on secrecy for protection. For this reason, counting on secrecy is destabilizing. There are many other technical arguments against secrecy, but so long as it is difficult to have open discussion with the Soviets, and so long as they have very little internal open discussion on these matters, it is difficult to expect them to change their opinions on these matters.¹¹

3—HARDER WORK FOR NEXT STEPS IN ARMS CONTROL AND DISARMAMENT.

The United States is the only nation in the world which has an agency like the Arms Control and Disarmament Agency, whose job it is to work hard and at a high level on the problems subsumed in its title.

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The hopes and the aspirations of the world are tied up with far-reaching general and complete disarmament. But GCD has not been attained, and is not more likely now than previously.

We should focus more of our energies on the important problem of first steps—which might indeed get us moving toward the goal which is too hard to get to in one jump. Doing something about reducing the chances of surprise attack, taking further measures to reduce the spread of nuclear powers, extending the test ban to all environments—certainly these are logical next steps. These steps aim in the right direction, and are necessary precursors to bigger steps.

4—DE-COUPLE ACCIDENTS FROM CONSEQUENCES.

Both the Soviet Union and the United States have large stockpiles of atomic weapons and delivery systems, and neither has used them in combat. There seems to be a general appreciation and understanding of the magnitude of destruction which would result from nuclear war. The likelihood of deliberate nuclear war in the near future seems low. These statements seem to have been transmuted by some critics of American defense policy into a statement that this situation is automatic, stable, assured, easy, and enduring. These critics then go on to suggest enormous reductions in the forces whose existence helped achieve this desirable condition. Realizing that what might be loosely called "rational" war seems to be out of the question, they proceed to turn all their worries to accidents, unintended war, and variations thereof. This concern is certainly legitimate.

About fifteen years ago, I started using the phrase *catalytic war* to describe a process, an extreme, but not the only, form of which would be country C starting a war between countries A and B either by malevolence, miscalculation, or other means.² Above all, we must be alert to the possibility of accidents and we must not react automatically. In the unlikely event of an accident, whether or not we respond by getting into a big war depends on whether or not we have anticipated and thought about this possibility ahead of time.

Speculation and thought on this problem is not new:

What would we do if such an event happened? This process does not lend itself to standard police investigative procedures, like taking fingerprints and interrogating witnesses. It is not that kind of an affair. Unless we had thought about this possibility (which we are now doing) there is some kind of chance that we might go to war. But, because we have thought about this, and because the consequences of war are even more serious, we would now pause and ask the question, "Where did it come from, and whose was it?" This suggests an interesting task, purpose, and value for mutual inspection systems.²

In fact, publicizing these considerations is itself an important deterrent to third-party mischief and adventurism.

The "hot" line between Washington and Moscow

will do part of the job called for by this suggestion.

By all odds, the mightiest blow struck in years against science, sanity, and sense in the discussion of the problem of accidents was given by C. P. Snow:¹³

. . . We know with the certainty of statistical truth, that if enough of these weapons are made—by enough different states—some of them are going to blow up through accident, or folly, or madness—but the motives don't matter. What does matter is the nature of the statistical fact. . . . For we genuinely know the risks. We are faced with an "either-or," and we haven't much time. Either we accept a restriction of nuclear armaments. . . . That is the "either." The "or" is not a risk, but a certainty. . . . The nuclear arms race between the USA and the USSR not only continues but accelerates. Other countries join in. . . . Within, at the most, ten years, some of these bombs are going off. I am saying this as responsibly as I can. That is the certainty. On the one side, therefore, we have a finite risk. On the other side, we have a certainty of disaster. Between a risk or a certainty, a sane man does not hesitate.

Snow infers, but does not state explicitly, that "some of these bombs going off" will result in general, full-scale nuclear war. Perhaps it is "obvious" to him, for he refers to the "certainty of disaster." What Snow and others have failed to realize is that we have gone a long time without a single accident and large numbers of nuclear weapons have been in possession of both the Soviet Union and the US for more than ten years. This does not mean, of course, that therefore we will go a similar length of time in the future without an accident. *This statistic does, however, argue against the "inevitability" of an accident over a corresponding length of time in the future. If anything, it suggests that the probability of an accident is extremely low.* This, of course, is insufficient.

It must be our position to see that accidents are prevented as far as possible, but that if they do occur they do not yield or lead to automatic inexorable consequences. *We must de-couple accidents and alleged automatic consequences.*^{14, 15} It is far too simple to assert that probabilities are cumulative. In fact, we are not dealing with coins, but with experience, and probabilities are continually modified by experience.

The likelihood of accidents may be low but, as long as there are weapons in the world, we cannot count on there being no accidents. What we should count on, and can insist on, is that kind of a pause in the event of an "accident" which would let us determine whether it was indeed an accident, or a provocation, or the beginning of a war. This is an important point, made in a Senate resolution by Senator Humphrey who, stating in detail what the United States is doing to maintain control over its weapons and to reduce the probability of accidental unauthorized use of weapons, called upon the Soviet Union to let the world know what *they* were doing about these same problems. The Soviet Union has not responded.

Important too are the consequences of the accident problem to the kind of strategy we need. The kind of strategy that we have and the forces we are building,

the thinking upon which forces and strategy *are* based, are clearly responsive to this problem. This is what was called for several years ago.²

There is serious thought about removing or desensitizing the retaliatory hair trigger, the instant-response strategy that we seem to prefer. One way that has been suggested is to slow down the required response time of our retaliation, to back off from the kind of instant response or preemptive strategy that used to be fashionable—to convert our strategy into what I have been calling a *metastable strategy*. This concept implies not perfect but relative stability. The idea I'm suggesting is simple. A successful strategy of this type would take us from an unstable situation to a relatively stable one. It would enable us to respond in some measure but without ultimate disaster and ultimate commitment—it would be a strategic boat that can stand a little rocking without being swamped.

What are the elements of such a strategy? It seems easier to describe than to attain. This strategy may take more money, for example. The elements that would enter into a stabilized deterrent strategy are those things which involve ensuring that we don't have to strike first or preempt ("anticipatory retaliation"), building a capability of being quiet while we are being hit, or absorbing a first blow, not having to respond instantaneously, not having to get our airplanes and missiles off at once. This strategy might involve, for example, building missile sites that are hardened, numerous, dispersed, or perhaps mobile—that are able to absorb the first hit. This is expensive.

Such a strategy would require having adequate mutual inspection—adequate information exchange with all possible opponents to convince each other that it neither pays nor is there occasion to strike first. I'm assuming we're in an era when we haven't got perfect disarmament, and that there are still some things to worry about. In the event of an accident, or a third-party attempt to catalyze a war, an adequate mutual-inspection system would enable the Russians to tell us and us to tell the Russians, "Now, look, that bomb didn't come from us, and we can prove it. It came from somewhere else. Don't start a war."

This list of "things to do" is not meant to be complete, nor inclusive. It ignores large blocks of important activity—our activities in support of the UN and specialized agencies, medical, food problems, problems of world trade, etc., etc. An equal list of domestic problems can and should be compiled and acted on. Despite Melman's stating it, it is not true that people interested in defense problems and in maintaining our security by military means are not interested or active in enhancing security by other methods or are indifferent to and uninterested in domestic and human problems. Military security is only one facet of the problems we face.

It was once appropriate to argue that "what is wrong with deterrence as we have come to talk about it is not deterrence itself, but an overwhelming preoccupation with deterrence alone to the exclusion of complementary and concurrent efforts."² Well, we are now engaged in complementary and concurrent efforts; the fact that they don't always succeed according to our expectations is not entirely our fault, for we are not in

complete and sole charge. When the Department of the Interior or the Army's Corps of Engineers fails to complete a dam in the United States, you know exactly where blame lies and where to assign responsibility. When the Arms Control and Disarmament Agency "fails" to secure an arms-control agreement, it is senseless and erroneous to complain to them alone. Some of the frustration and disappointment should be siphoned off and directed toward the Soviets.

Hope for a more peaceful world, and more important, positive actions, must take off from a secure foundation. Surely it is in order to give some credit to the forces that have fulfilled their mission of deterrence. It is no advance toward negotiated disarmament, toward greater stability, toward a more peaceful world to enter the door marked "unilateral disarmament."

We can hope boldly, but we had better judge cautiously.—END

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